



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,664	04/03/2001	David R. Hembree	MI22-1680/US	4481

21567 7590 06/06/2003

WELLS ST. JOHN ROBERTS GREGORY & MATKIN P.S.  
601 W. FIRST AVENUE  
SUITE 1300  
SPOKANE, WA 99201-3828

EXAMINER

NGUYEN, VINH P

ART UNIT PAPER NUMBER

2829

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/825,664

Applicant(s)

HEMBREE, DAVID R.

Examiner

VINH P NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-17 and 53-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-17 and 53-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 18. 6) ☐ Other: \_\_\_\_\_

Art Unit: 2829

1. Claims 68 and 71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 68, it is unclear what "an electronic device wafer processing apparatus" represents. Is it shown in any of drawings? It appears that this term does not exist in claim 14.

In claim 71, it appears that the limitation of "using the intermediate member to fabricate a plurality of discrete integrated circuits of a plurality of respective dies..." is inaccurate. It appears that this intermediate member could not use for such purpose.

2. Claims 69-72, 74-78 and 80 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the original specification does not have support for the limitations of claims 69-72, 74-78 and 80.

It is noted that intermediate member is configured to support the wafer and to electrically connect the electrical coupling of the wafer with the electrical coupling of the chuck but not for processing within the wafer processing apparatus to form a plurality of discrete integrated circuits of a plurality of respective dies.

3. Claims 14-17, 53-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (pat # 5,475,317) in view of Hagge et al (Pat # 3,710,251).

As to claims 14-15,17,54-55,58,60-62,67-68, Smith discloses a singulated bare die tester having a workpiece holder or a chuck (4,12) for receiving an electronic die (2) and for supporting an electronic die (2), electrical coupling/wires (12a) for electrically coupling the electrical coupling (2a) of the electronic device die (2) and communicated signals between the workpiece and the workpiece holder (12). It is noted that the workpiece (2) of Smith is a singulated die and this die is a part of the wafer. However, Hagge et al teaches that it would have been well known for one of ordinary skill in the art of semiconductor to consider that the apparatus for testing chip or wafer is interchangeable (see the abstract on line 1 and column 2, line 13-15). Therefore, it would have been obvious for one of ordinary skill in the art to use the device of Smith to test the wafer or chip as taught by Hagge et al since the both of these devices have the same characteristics and they are interchangeable.

As to claims 16,59 and 66, it is noted that the electrical interconnect of Smith does not comprise pogo pin. It would have been well known for one of ordinary skill in the art to consider that pogo pin would have been a known probe for conducting electrical signal. Therefore, it would have been well known to use "pogo pin" in the device of Smith so that the pin could reach to different surface level of the test pads of the die (2) without damaging the pads.

As to claims 53,57 and 64, the interconnect member (4,6) are made of ceramic, therefore this material is considered as substantially non-conductive material.

As to claims 56 and 63, it appears that an outwardly exposed surface of the electrical coupling (2a) of the die/wafer (2) is substantially coplanar with the surface of the die/wafer (2).

As to claim 65, Smith discloses a burn-in board configured to receive signal. It would have been well-known that this board is equivalent to the data gathering device since it serves the same purpose as the one in the instant application.

It is also noted that the preamble is not given the effect of a limitation unless it breathes life and meaning into the claim. In order to limit the claim, the preamble must be "essential to point out the invention defined by the claim." *Kropa v. Robie*, 88 USPQ 478, 481 (CCPA 1951) (discussed below). In claims directed to articles and apparatus, any phraseology in the preamble that limits the structure of that article or apparatus must be given weight. In *re Stencel*, 4 USPQ2d 1071 (Fed. Cir. 1987) (discussed below). On the other hand, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend *on* the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. In *re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) (process claims, discussed below). *Kropa v. Robie*, 88 USPQ 478, 481 (CCPA 1951) (claims directed to apparatus, products, chemical structure, etc, as discussed below).

Art Unit: 2829


4. Applicant's arguments filed on 03/13/03 have been fully considered but they are not persuasive.

It appears that Applicants failed to point out in the support for the limitations of claims 69-72, 74-78 and 80 in the specification.

It is noted that intermediate member is configured to support the wafer and to electrically connect the electrical coupling of the wafer with the electrical coupling of the chuck but not for processing within the wafer processing apparatus to form a plurality of discrete integrated circuits of a plurality of respective dies.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

  
VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2829  
05/29/03